## **CLARK COUNTY AIR QUALITY FORUM**

### **AGENDA**

March 13, 2007 1:30 – 3:30 p.m.

Government Center 4<sup>th</sup> Floor, Gold Room 500 S. Grand Central Parkway Las Vegas, NV

- 1. Welcome and Introductions
  Forum/TAC Update and Follow up from November Meeting
  Jennifer Carr, NDEP (30 minutes)
- 2. Public Input
- 3. Clark County Monitoring Network Current Status and Planning DAQEM Monitoring (30 minutes)
- 4. Ozone Status DC Court Decision Impacts, Issues & Plans for 2007 DAQEM AQ Planning (15 minutes)
- 5. Diesel Emission Reduction & Mobile Projects DAQEM Mobile Sources Section (15 minutes)
- 6. Wrap Up/Questions
  Next Meeting Tuesday, July 10, 2007

## **CLARK COUNTY AIR QUALITY FORUM**

### **MINUTES**

March 13, 2007 1:30 – 3:30 p.m.

RTC, Room 296 600 S. Grand Central Parkway Las Vegas, NV

### The Meeting was attended by:

Clete Kus, CNLV

Jennifer Carr, NDEP, Chair
Roland Fornoff, NSBDC – BEP
Larry Tamashiro, SNWA
Leonard Krane, N.E.C.
Greg Cole, DMV
Joe Hameed, DAQEM
Jane Feldman, Sierra Club
Robert Hall, NV Env. Coalition Inc.
Karina O'Conner, EPA
Dave DuBois, DRI
Pat Mohn, NDOT

Mike Sword, DAQEM
Vasant Rajagopalan, DAQEM
Ted Lendis, DAQEM
Russ Lucas, Jiffy Smog
Dennis Ransel, DAQEM
Shimi Mathew, Nellis Air Force Base
Steve Koon, Boulder City
Cheng Shih, City of Las Vegas
Randy White, DAQEM
Brenda Williams, DAQEM
Brenda Pohlmann, City of Henderson

### Agenda Item #1) Welcome and Introductions – Jennifer Carr, NDEP

In order to accommodate presenter's schedules, Agenda Item #3 was taken out of order and covered first:

### Agenda Item #3) Clark County Monitoring Network – Joe Hameed - DAQEM

Mr. Hameed showed and discussed a PowerPoint presentation on Clark County's Air Quality Monitoring Network (*See Attachment A*). This presentation covered general information about the monitoring network.

### Additional Notes:

The Annual Network Monitoring Plan will be noticed and available for public inspection through the Monitoring Network website and the Clark County Department of Air Quality and Environmental Management's mailing list.

### Questions asked by the attendees:

Mr. Bob Hall: Question regarding mailing lists – Mr. Hall noted that he has been off of the list, but wants to be re-included, as well as other environmental groups. Mr. Hall further noted that he is seeking to have sunshine on the DAQEM databases, transparency and the confidence that DAQEM staff project.

DAQEM: Staff offered to sit down with Mr. Hall to discuss this.

### Agenda Item #1) Welcome and Introductions – Jennifer Carr, NDEP

- A. Ms. Carr & Mr. Dennis Ransel went over the Legislative updates with the Forum.
  - a. SB161 Senator Coffin; I/M 3 year Exemption and Hybrid bill Increase waiver for smog test from 2-3 years. 2 years is in the current approved SIP. Waive smog check for hybrids. There is no limit in the draft bill; Clark County is pushing for a time limit (e.g. 5 years).
  - b. AB 173 Assemblyman Hogan; Diesel idling bill Includes changes to the existing Nevada idling regulations for heavy duty diesel trucks. The bill would change the limit on idling from 15 (consecutive) minutes to 5 minutes with a maximum of 3 periods within an hour. There has been a lot of opposition to the bill in the original hearing due to enforcement issues. Further discussions are ongoing in response to EPA's model rule on idling, the trucking industry is interested in a common idling law within western states.
  - c. SB105 Senator Townsend; Revisions to Fuel Regulation Setting Process This bill deals with the Dept. of Agriculture's fuel specification setting authority. Initial versions of the bill limited the Dept of Ag to only setting ASTM standards, but Clark County has worked to change the language so that biofuels can still be used and the Counties will be able to amend specs for air quality purposes. Bill now proposed to be revised to remove restrictions on alternative fuels and to allow the DOA to set new rules if needed for AQ purposes.
  - d. SB241 Senator Titus; Registration Fee Waiver for Hybrids
    This bill waives the registration fee for Hybrid electric vehicles (waived for first time out). The only issue is the way hybrids are identified.
  - e. In addition, Clark County is tracking a Clean Cities initiative to provide funding to initiate program/outreach to public about clean fuels and clean technology vehicles: energy efficiency, GHG emissions, and Federal initiatives.
- B. Ms. Carr reviewed the discussion from the November 2006 meeting on the Forum Structure and Ideas for Future Agenda Items.

#### Forum Structure:

At the November meeting of the CCAQF, we had a very good discussion about the Clark County Air Quality Forum and where it, as well as the Technical Advisory Committee, should go in the future.

It was very clear that residents, associated local agencies and industry, value the Forum as a link to the County program. The Forum provides a public link to learn about County plans and actions related to air quality, as well as a forum to voice opinions, positions and concerns.

Since the November meeting, I have had a number of follow-up conversations related to the Forum and the TAC. As a result, it seems that certain changes can be initiated in order to have these two entities improve operational efficiency and reduce redundancy of information being provided to participants.

In the interest of ensuring the continued value of future meetings, the following plans are recommended and, barring opposition, will be put into place beginning in July:

- Maintain the Forum meeting frequency at every 4 months, TAC at every 2
- Move the Forum meeting to the morning and the TAC to the afternoon
- Use the Forum to present air quality issues, projects, County work products
- Use the Forum as the first public access point for interaction & involvement with DAQEM
- Follow Forum meetings with TAC meetings to further discuss technical detail, project proposals and studies, impacts of future actions (SIP decisions, EPA rulemaking, etc). Generally, provide input to DAQEM to assist in guiding their decision-making.

Mr. Dennis Ransel noted that Clark County is looking at making changes in the TAC structure to have it be a more interactive process. There are 23 members of the TAC and most have not been participating, causing difficulty in establishing a quorum. Mr. Ransel is investigating what changes can be made to the structure of the TAC and how to best accomplish streamlining that process – some items are constrained by decisions made by the Board of County Commissioners, who would have to approve certain changes. It is envisioned that with the changes, the group could be more of an advisory group for DAQEM. DAQEM will draft a new resolution to narrow the voting membership, but the meetings would still be noticed to all currently listed participants, be open to the public and to interested parties.

### *Questions and Comments from the Forum:*

Mr. Bob Hall commented that this is an opportunity to invite the environmental groups. He also ask the Forum to call him and tell him what they don't like and don't agree with on his web site. He commented that they want to work together, but don't have all the information they seek and make their own assumptions. He asked what they could do to help and commented that they didn't want to be a burden.

Mr. Ransel stated that they have had some revisions to their web site. They would like to set up meeting announcements, agendas, minutes, presentations on the DAQEM web site. They can revise the list of participants. He did state that Mr. Halls' emailed notices really help.

Comment from the public: There is a Sun City residents group (all residents automatically members -15,000 folks) that would be interested.

There was also a request that the CCAQF avoid meetings on the same day as the Lake Mead Water Quality Forum. Another thought was expressed to possibly have a joint meeting with the Water Quality Forum because there are overlapping issues such as water use for dust control.

Jerry Duke discussed his ideas for a graphical profile of how the regulatory and municipal entities involved in the Forum interrelate and tie to various work products. The concept includes a "clickable" flow chart with relationships and activities associated with each agency. The idea garnered support from attendees. This will be initiated by Mr. Duke and a presentation will be on a future agenda.

Future Agenda Item Ideas: (See Attachment B)

## Agenda Item #4) Ozone Status – DC Court Decision Impacts, Issues & Plans for 2007 – John Koswan – DAQEM

Mr. Koswan went over the court decision that was made in April 2004 – EPA made ozone designations, immediately upon publication of the Phase I Implementation rule, a number of groups sued EPA on the rule – Challenge was that EPA exceeded it's authority in setting classifications.

- South Coast AQ Management District case is the consolidated case for the litigation. In response, on December 22, 2006 the District Court vacated EPA's Phase I implementation rule. That rule contained the classifications; Clark County areas were classified as Subpart 1 (basic non-attainment).
- The court looked at EPA's discretion and indicated that EPA exceeded their authority (granted by congress). The court indicated that EPA's reasoning was unreasonable and exceeded their discretion. EPA had 60 days to file, then EPA filed for an extension (45days) until March 22 to file for rehearing.
- We don't know what Clark County's classification is at this time. Therefore, we do not know what the content requirements are for our SIP is at this time. Yet, the clock is ticking, and DAQEM is deciding what to do for the June 15, 2007 SIP submittal deadline.
- There is some good news; the ozone non-attainment area now appears in attainment based on analysis of the 4<sup>th</sup> highest value over the rolling 3 year period of '04, '05 & '06. Under the implementation rule, the area would have to be in attainment by 2009 based on 2006/07/08 data). We've reached attainment early and we now have additional avenues available. Clark County is considering a request to EPA for an early attainment decision or "clean data finding". At this point, Clark County is continuing to complete ozone studies, but is not sure what will happen on June 15<sup>th</sup> (when the attainment plan is due to EPA).
- Note that wildfires can influence ozone in Clark County and are evaluating fire-related data; however, Clark County can't control wildfires since they occur in California. The upcoming EPA final rule on Natural and Exception events should help with planning and will result in more education and outreach.
- Note that the Phase II rule is also being briefed for litigation (with classifications) and the court may reach the same conclusions.

### Questions and Comments from the Forum:

Mr. Bob Hall noted that CC DAQEM should request FLM documentation of NEPA information and then use it to the benefit of the County. Mr. Hall asked, why doesn't Clark County go ahead and do what they think is needed? A simple letter asking for compliance with NEPA would be useful. Clark County responded that they may not be able to submit a SIP. Bob Hall asked why not, and if it could be amended later, generally recommending that Clark County should submit it. Clark County anticipated that EPA could take no action on the plan if it were submitted, but further noted that they may make a formal request from EPA on what their classification is. EPA noted that they were scheduled to meet with the County to discuss options.

A Forum attendee asked if CC DAQEM has been in contact with California agencies regarding the impacts of wildfire and ozone. Clark County responded that the California agencies positions are that they are already doing all that they can.

### Agenda Item #5) Diesel Emission Reduction & Mobile Projects – Rich Hanson – DAQEM

Mr. Hanson showed and discussed a PowerPoint presentation on Diesel Emission Reduction and Mobile Projects (*See Attachment C*). Mr. Hanson stated that funding has become available to implement diesel emission reductions strategies. Programs CC DAQEM would like to implement include: Truck Stop Electrification Program, on and off road diesel retrofits, a Gas can exchange program, and a program for lawn mower exchanges.

### Questions and Comments from the Forum:

Are there any of these systems already in use? The response was yes, in Southern California in the I-15 corridor, approximately 200 slots were operational. The CMAQ funding guidance has been changed, so more systems are going online. There is one 79 slot system already in use in Las Vegas, partially funded by the manufacturer IdleAire, at the Speedway location. Proposed Clark County projects will have 50 slots and the locations are still under discussion with IdleAire. A candidate site is at the I-15/Craig road truck stop.

### Agenda Item #2) Public Input

No additional input not otherwise covered.

### Agenda Item #6) Wrap Up/Questions

The next meeting is scheduled for Tuesday, July 10, 2007. Time tentatively set for 10:00 am pending agreement of a scheduling shift with the Technical Advisory Committee.

# Air Quality Monitoring Network

Present by the Clark
County Department of Air
Quality and Environmental
Management (DAQEM)

**Monitoring Section** 

# Introduction

- Joe Hameed DAQEM
- The purpose of the presentation is to provide information to stakeholders about the Clark County DAQEM Monitoring Network

# **Topics of Discussion**

- Current Status of the Network
- Impact of New EPA Monitoring Regulations
- Quality Assurance and Quality Control
- Status of Annual Network Plan Report
- New Data Acquisition System
- DAQEM Attributes

# **Current Status of Network**

Pollutant	Monitors Required	Monitors in Service
Carbon Monoxide	0	6
Sulfur Dioxide	0	1
Nitrogen Dioxide	0	6
Ozone	2	15
Particulate Matter PM <sub>10</sub> BAM	4 – 8	16
Particulate Matter PM <sub>2.5</sub> BAM	0	7
Particulate Matter PM <sub>2.5</sub> FRM	2	5 + collocation

# **Additional Monitoring**

- Meteorological Monitoring
  - Supports Pollution Monitoring
  - Forecasting
  - Compliance
  - WS/WD, Temp, BP, RH, SR and Visibility
- Pollen Monitoring
  - 11 sites throughout the valley
  - Information provided to the public and the American Academy of Asthma, Allergy, & Immunology (AAAAI)

# New EPA Monitoring Regulations

On October 17, 2006, the US EPA released the revised 40 CFR Parts 50, 53, and 58 Regulations.

# Impacts of New Regulations to the Clark County Monitoring Network

- Change in PM<sub>2.5</sub> Sampling Frequency
- PM<sub>2.5</sub> 24-Hour Standard changed from 65 μg/m3 to 35 μg/m3
- No Requirements for CO, NO<sub>2</sub>, and SO<sub>2</sub> Monitoring
- Annual Network Plan
  - Subject to EPA Approval
  - Public Inspection

# Impacts of New Regulations to the Clark County Monitoring Network – Long Term

- NCore Multi-Pollutant Monitoring
  - ◆ Plan Submitted July 2009
  - ◆Begin Monitoring January 2011
- 5-Year Network Assessment
  - ◆ First Due July, 2010
  - Comprehensive in Scope

# Quality Assurance (QA)

- QA Autonomous
- Activities in accordance with 40 CFR 58 App. A
- Independent Data Reporting
- Special Needs
  - Spot Audits
  - Review of Permit Monitoring Requirements
  - Provide Guidance

# Quality Control (QC)

- Routine Network Maintenance
- QC Exceeds Requirements of 40 CFR 58
  - Qualitative and Quantitative
- Highly Competent Staff

# **Annual Network Plan Report**

- Required As part EPA (new) Monitoring Regulations
- EPA will Approve or Disapprove Changes Outlined in Plan
- Will Be Available for Public Inspection 30
   Days Prior to Submission to EPA
- Status of this Years Network Plan
  - Report Changes Being Addressed
  - Majority of Plan is Complete

# New Data Acquisition System (DAS)

- Migrating to new DAS Why?
  - Old DAS out of date
  - New Technology is Superior
- Vendor IPS MeteoStar Why?
  - Robust Data Collection
  - Automated QC Processes
  - Improved Data Validation Tools
  - Built-in Forecasting Component

# New DAS (Cont.)

- Project Status
  - ◆Over 50% Complete
  - Full Implementation is Anticipated within CY 2007

# DAQEM Monitoring Section Attributes (too many to list)

- Exceed EPA Requirements
- Monitoring Website updated hourly
- Pollen Network
- Visibility Network
- Quality Data
- Competent Staff

# Closing

Any Questions or Comments?

Thank You

## Clark County Air Quality Forum

# Future Agenda Ideas from the November 14, 2006 Meeting

- Develop a simple graphic profile that ties activities and entities together.
  - Show regulations, policies, SIP's, etc. in the works
  - Links between federal state and local agencies and how actions impact the Las Vegas Valley.
- ➤ Use profile concept for web and meetings: What's being discussed? How do decisions affect me? How do the pieces fit together?
- ➤ SIP's and Fuels, implications and control measures.
- The State's progress on alternative energies, and greenhouse gases.
- ➤ Reports related to what is going on in other parts of the State, such as periodic Washoe County reports.
- Report on El Dorado Valley solar project.
- ➤ Air Quality on Federal lands in Clark County and rural ozone.
- Air Quality issues in California and Arizona.
- > Try a different approach, bring in outside guest speakers (i.e. utilities).
- Explore how to cross-pollinate various involved entities and discussions to get more ideas into the room.
- Air toxics, Sierra Club/I-95 progress and ANPR's on urban air toxics.
- Discussion on efforts to reduce the urban heat-island effect.
- > Other growth areas: Coyote springs, Ivanpah, Pahrump.
- Regional Haze update

## \*\*\*\*\* New Ideas From March 13, 2007 \*\*\*\*\*

- ➤ Role of FAA in air quality
- > RTC land use planning & profile (possibly for the July meeting?)

# Clark County Department of Air Quality and Environmental Management





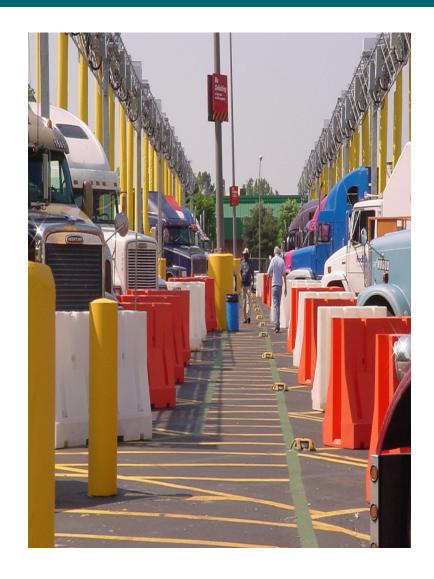
# Diesel Emission Reduction Program: Advanced Truck Stop Electrification

March 13, 2007

# **Diesel Emission Reduction Program**

# ■ Advanced Truck Stop Electrification (ATE)

- The ATE is a comprehensive solution for idle reduction.
- The ATE provides heating and air conditioning, as well as communication and entertainment options.
- The ATE allows a truck driver to completely shut down his or her engine.
- This is the <u>ONLY</u> Electrification
   System that allows <u>ANY</u> Truck to
   Stop Idling Today!



# **Diesel Emission Reduction Program**

# ■ Advanced Truck Stop Electrification (ATE)

- -ATE eliminates more than 98.7 percent of all NOx, VOC, PM, and CO emissions, and more than 93.1 percent of the CO2.
- -These emission reductions are adjusted to reflect the power each truck is utilizing from the electric grid.
- -To date, this ATE system has provided over 12.3 million hours of service, reduced over 130,000 metric tons (more than 286 million pounds) of harmful air emissions, and saved over 12.3 million gallons of fuel.



## **Emission Reductions Per Pollutant**

Pollutant <sup>1</sup>	Single Truck (g/hr)	Single Truck (9.6 Hrs/Day) (Metric Tons/yr)	50 Spaces (9.6 Hrs/Day) (Metric Tons/yr)	500 Spaces (9.6 Hrs/Day) (Metric Tons/yr)
NO <sub>x</sub>	135.00	0.41	23.65	236.52
PM	3.68	0.011	.645	6.477
VOC	6.84	0.021	1.199	11.992
СО	56.14	0.169	9.84	98.36
CO <sub>2</sub>	10,397.00	31.14	1,021.55	18,215.54
Total	10,598.66	31.75	1,856.89	18,568.57

<sup>1</sup>The emission factors for CO and VOC come from EPA's Mobile6 Emissions Model to estimate the emissions from idling trucks. NOx and PM factors are calculated based on 2004 EPA Guidance. Diesel CO2 emission values are based on Argonne models. Electric emissions for CO, NOx, PM, and VOC come from Argonne's GREET model: CO2 from EPA breakout by region.

An IdleAire utilization rate of 40% (9.6 hours/day/unit) is assumed.

# **Proposed Clark County ATE System**

# ■ ATE System in Clark County

- Department of Air Quality and Environmental Management (DAQEM) applied for and received federal Congestion Mitigation and Air Quality (CMAQ) monies to install ATE systems in Clark County.
- DAQEM plans to build up to three 50parking space ATE facilities.
- 80% of the project will be funded by CMAQ monies.
- 20% of the project will be funded by the ATE system provider.



## **Emission Reductions Per Pollutant**

## **Emission Reductions from Installation of 150 ATE Units in Clark County**

Pollutant	Total Idling Emission Reductions (Metric Tons/yr)	Emissions from Electric Generation (Metric Tons/yr)	Expected Net Emission Reductions (Metric Tons/yr)	Percentage Reductions
NO <sub>x</sub>	73.95	1.4	72.6	98.2%
PM	1.95	0.0	1.95	99.6%
VOC	3.75	0.0	3.75	99.7%
СО	30.75	0.2	30.6	99.7%
CO <sub>2</sub>	5,692.4	392.7	5,299.7	93.1%
Total	5,802.8	394.3	5,408.6	93.2%

## **Services Provided to the Trucker**

## **Standard Services**

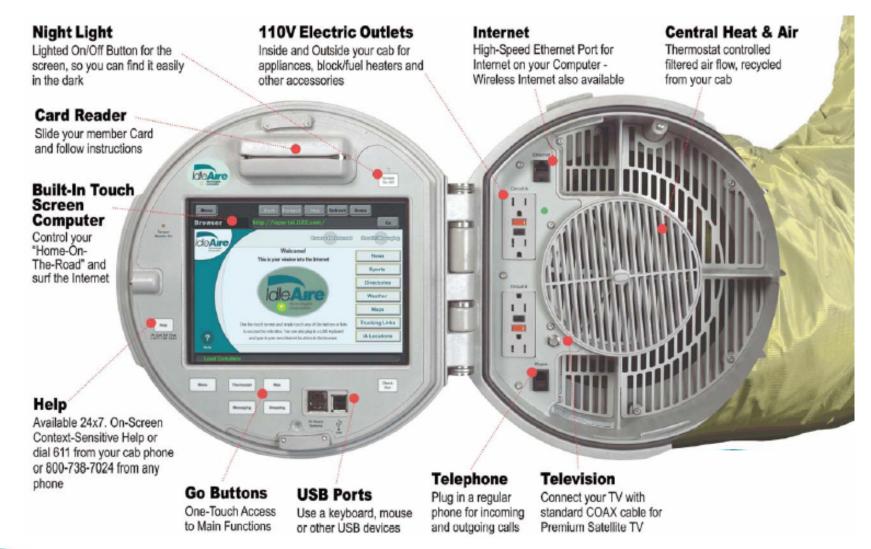
- Remote Controlled Power
- Filtered Heating and Air Conditioning
- In-Cab Computer With Touch Screen
- Internet Access With Email
   Satellite TV
- Telephone Connection

## **Optional Services**

- Video & Movies on Demand
- In-Cab Training (Interactive Video)
- Discount Long Distance Calling
- Ethernet & WiFi Internet connections



# **ATE System Service Module**





# The ATE System





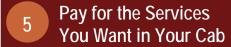
Insert Service Module Into Window Adapter

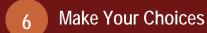


















## **ATE Provides Benefits for Everyone**

### **Truck Drivers**

Stops Idling Noise & Vibration
Improves Quality of Rest
Provides New Entertainment &
Communication Features

### **Fleet Owners**

Reduces Fuel, Maintenance and Insurance Costs

Hedge Against 100% Driver Turnover

Improves Communications and Logistics Management

# Truck Stops, Ports, Terminals, etc.

Substantial Revenues from Parking Spaces

Stops Idling Noise & Emissions

Reduces Oil-Water Runoff

Provides competitive advantage in attracting drivers

## **Environmental & Community Benefits**

Stops Idling Noise
Stops Idling Emissions
Compliance with Clean Air
Act

Stops Fuel Waste Efficient Energy Use Improves Highway Safety Reduces Health Costs
Stops CO Poisoning
Reduces Illegal Parking

## **ATE Public Benefits Summary**

- In sum, ATE systems deliver substantial, measurable emission reductions and provide superior driver comfort during rest periods.
- Locally, Clark County DAQEM plans to utilize federal CMAQ monies to provide up to 3 ATE 50-space truck stop locations.
- Nationwide, current build out of 210 additional locations is expected to reduce emissions by 500,000 metric tons, while saving over 50 million gallons of diesel fuel annually.
- Nationwide, future deployments has the potential to save up to 4.4 billion gallons of diesel fuel each year while reducing noxious air emissions by 46 million tons annually.